Coal Resource and Coal Reserve Statement

Fiscal Year Ending March 31, 2022

July 12, 2022

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1.0 Introduction

1.1 Purpose of Report

CST Coal Canada Limited (CST Coal) commenced mining in the West Extension pit phase of No. 8 Mine in July of 2018 and mined this area in 2 periods from 2018 to until May, 2020, and from November 2021 to now. A Coal Resource and Coal Reserve Statement was completed in-house by CST Coal effective to March 31, 2021, and issued June 10, 2021. With the exception of No. 8 Mine, the 2021 reserve statement is unchanged from a reserve statement covering the CST Coal property prepared by an independent consulting firm, effective December 31, 2017. The purpose of this report is to update CST Coal's coal resources and coal reserves to reflect those resources and reserves remaining after coal extraction completed by CST Coal in the period April 1, 2021 and March 31, 2022.

1.2 Background

During the period since the last reserve statement, the mining operation operated for approximately 4.5 months. The mining transitioned from a care and maintenance mode to active surface mining in mid-November 2021. In this period the mine was not operating at full capacity due to the ramp up in the workforce. For most of the period only 2 of the 3 owned major excavating units were in operation, and 6 of the owned fleet of 13 large haul trucks.

During the period of production since the last reserve and resource statement there were no regulatory impediments to production. An application to the Alberta Energy Regulator (AER) to slightly modify the pit bottom design and south footwall design of the No. 8 West Extension Syncline pit phase was submitted in late March 2021, and approved in July 2021. This regulator-approved design modification to No. 8 Mine is the basis for the remaining reserve calculation in this report.

The entire No. 8 Mine reserve area is covered by a Mine Permit.

In the CST Coal fiscal year ending March 31, 2022, approximately 0.27 million tonnes of raw or run-of-mine coal were reported as extracted and hauled to the coal process plant. In this period the coal process plant produced approximately 0.18 million tonnes of marketable coal. Strip ratio was approximately 8.5 to 1 on a Bank-cubic-metre (BCM) to ROM basis.

The reserve base of the CST Coal property includes underground mineable coal reserves. The most recent underground mine at No. 12 South B2 was complete for the 7 Seam as of January 24, 2015, and the portal was sealed as per regulatory requirements, with final abandonment still pending. The No. 12 South underground mine licence related to mining at the No. 4 Seam is suspended and mining infrastructure remains in care and maintenance status.

The geological interpretation of No. 8 Mine was updated most recently in April of 2021, based on in-pit survey and blasthole data. Exploration was not conducted in any areas of No. 8 Mine in the CST Coal Fiscal Year 2022 (FY 2022), and no other geological interpretations were updated for areas other than No. 8 Mine in the CST Coal property reserve base.

1.3 Summary

This report covers only Coal Resources and Coal Reserves remaining in the ground as of March 31, 2022. The coal reserves both ROM and Saleable were estimated using the same software and methods, but an updated geological model, was used to generate this 2022 Coal Resource and Coal Reserve Statement. .

The starting surface for the reserve calculation was a merging of airborne Lidar topographic mapping from September, 2021 of the No. 8 Mine area and CST drone-acquired photogrammetric topographic mapping in the period March 29 to March 31, 2022 of the active mining area.

No changes were made to Coal Resources in any of the other mining areas except No. 8 Mine. The No. 2 Surface, No 9 Surface, No. 12 North Surface, No. 16 Surface, No. 12 South B2 Underground, No. 12 South A Underground and No. 9 Underground coal resources are unchanged from the CST Coal 2021 Coal Resource and Coal Reserve Statement.

No changes were made to Coal Reserves in any mining area except No. 8 Mine. The No. 2 Open Pit, No. 12 South B2 Underground, and No. 12 South A Underground coal reserves are unchanged from the CST Coal 2021 Coal Resource and Coal Reserve Statement.

The Coal Resource for No. 8 Mine was updated by a four stage process:

1.0 Update the geological coal seam geometric models, and coal quality database, using blast hole information, coal trench sampling data, surveyed coal seam footwall and hanging wall picks, and in-pit shallow exploration boreholes.

2.0 Update to the period ending March 31, 2022 the end of period survey status surfaces, including the surfaces defining bedrock, unconsolidated till and colluvium material, and backfilled waste material.

3.0 Update a block model covering the extents of the No. 8 Mine Life-of-mine pit area with the new seam geometry, added coal quality information, bedrock, till and re-handle waste volumes, re-calculating density, recovery and yield parameters where data were revised in the vicinity of recent mining.

4.0 Intersect the updated No. 8 Mine Life-of-mine (LOM) pit shell with the updated block model to generate estimates of the remaining coal reserves, both ROM and saleable tonnes, along with any changes in projected coal quality.

Using this procedure the ROM Coal reserves in No. 8 Mine were reduced by 0.2 Mt, March 2021 to March 2022. All this coal was in the proven confidence of existence category.

Coal reserves were reduced in FY 2022 in No. 8 Mine from 10.3 Mt to 10.1 Mt on a ROM basis, and from 7.1 to 7.0 Mt on a Marketable basis. This reduction on both the ROM and Marketable basis was wholly within the proven reserve confidence category.

The difference between the FY 2021 period end reserve estimate and the FY 2022 period end reserve estimate would estimate that 0.2 Mt ROM were mined from the West Extension Phase of No. 8 Mine in FY 2021. However, the reported actual ROM tonnes mined was larger than 0.2 Mt (0.3 Mt ROM). Analysis of this discrepancy indicates that there were not significant differences in in-situ ash content, in-situ density, recovery, dilution and loss factors, compared to those used to estimate reserves in 2021. The discrepancy can be attributed primarily to increases in seam thickness compared to the geological model.

The remaining coal resource in all mine areas of the CST Coal Property as of March 31, 2022 in the three confidence categories of measured, indicated and inferred was 659.4 Mt. The mineral rights to these coal resources and reserves are 100% owned by CST Coal.

2.0 Compliance Statements

2.1 JORC Code 2012

Statements of Coal Resources and Coal Reserves have been produced in accordance with the Australasian Code for reporting of Mineral Resources and Ore Reserves 2012 (JORC 2012 Code).

This report includes previous statements of Coal Resources and Coal Reserves compiled by CST Coal Canada Limited compliant with the JORC 2012 reporting standard. The most recent of these statements was the Coal Resources and Coal Reserve statement effective March 31, 2021. Issue date of this report was June 10, 2021. This report can be found at: http://www.cstgrouphk.com/en/business/cst_coal.php

This report adopts the technical, and economic criteria underpinning the previous coal resource and coal reserve statements to update coal resources and coal reserves to March 31, 2022. CST Coal is not aware of any new information that materially affects the information included in this report or any material changes to modifying factors used to estimate coal reserves from coal resources which have been incorporated unchanged from the 2021 Coal Resource and Coal Reserve Statement.

2.2 Competent person

The information in this report that relates to Coal Resources or Coal Reserves is based on information reviewed or compiled by Brian Klappstein, a Competent Person who is a Member of a 'Recognized Professional Organization' (RPO) included in a list that is posted on the ASX website from time to time (Alberta Professional Engineers and Geoscientists Association).

Brian Klappstein has sufficient experience that is relevant to the style of mineralization and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Brian Klappstein consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

2.3 Statement of Independence

The Competent Person preparing this report, Brian Klappstein, is a full-time employee of CST Coal. Brian Klappstein holds no securities, directly or indirectly related to CST Coal.

2.4 Document Authentication

B. R. Klappstein, P. Geol
July 12, 2022
APEGA Registration #41936

3.0 Mineral Tenure

The Company holds the coal mineral rights to 29,968 hectares in the western foothills of the province of Alberta. These coal leases cover an area approximately 35 km from south east to northwest and 15 km from south west to north east. These coal leases are titled in 25 separate documents issued by Alberta Energy.

All these leases have a term of 15 years and are renewable conditional on lease terms being complied with by CST Coal. Pending expiry dates vary from August 2022 to February 2036. A list of the lease holdings is shown in Table 3.1. Figure 1 in the Appendix shows the lease blocks in relation to previous and future mining areas.

Table 3.1 CST Coal– Coal Leases

Lease Number	Hectares	Effective Date	Expiry Date
1321020117	64.0	2022-02-17	2036-02-17
1321020118	416.0	2022-02-17	2036-02-17
1321020119	2,736.0	2022-02-17	2036-02-17
1306080740	1,792.0	2006-08-08	2022-08-04
1306080741	1,360.0	2006-08-08	2022-08-04
1306080742	864.0	2006-08-08	2022-08-04
1312010593	1,680.0	2012-01-26	2027-01-26
1312010594	1,584.0	2012-01-26	2027-01-26
1312010595	1,488.0	2012-01-26	2027-01-26
1312010596	1,568.0	2012-01-26	2027-01-26
1312010597	656.0	2012-01-26	2027-01-26
1312010598	144.0	2012-01-26	2027-01-26
1312050627	16.0	2012-05-03	2027-05-03
1312050628	32.0	2012-05-03	2027-05-03
1312050629	16.0	2012-05-03	2027-05-03
1312050630	16.0	2012-05-03	2027-05-03
1312050631	64.0	2012-05-03	2027-05-03
1315090180	608.0	2015-09-06	2030-09-06
1315090181	496.0	2015-09-12	2030-09-06
1318010236	224.0	2018-01-31	2033-01-31
1319020121	1,744.0	2019-02-02	2034-02-02
1319020122	912.0	2019-02-02	2034-02-02
1319020123	8,720.0	2019-02-02	2034-02-02
1319020124	2,576.0	2019-02-02	2034-02-02
1319090187	192.0	2004-10-14	2034-09-01
Total	**29,968.0**		

4.0 Geology

4.1 Deposit Mineralization

The coal resources and coal reserves reported herein are located in the western foothills of Alberta where a stratigraphic sequence of approximately 150 m of Lower Cretaceous non-marine clastic sediments contain seven coal seams ranging in thickness from 7 metres to 1.5 metres. The Company coal leases are within a larger area of economic coal measures known as the Smoky River Coalfield.

The deposit is extensively deformed by the compressive tectonics of the Laramide Orogeny, with thrust faulting and folding creating thickened coal zones up to 5 times the stratigraphic thickness of the seams. Fault throw is up to 2000 m, and fold amplitudes are up to 1500 m. Dips range from flat to vertical, with the limbs of major folds being generally deformed by smaller scale parasitic folding and imbricate small scale thrust faulting.

Surface resources areas are found within the most severely structured zones, where thickening of the coal seams under compressive tectonic forces is extensive. Underground resource areas are found is less structured areas where flat bottomed synclines, or gentle anticlines with limb dips of less than 25 degrees, lie between the more structured zones. These zones of gently dipping coal measures can be up to 2 km in width and in general do not show extensive structural thickening of the coal seams.

Coal quality of the various coal resource areas is well understood from an extensive database of exploration core sampling, exploration adits, and by sampling of processing operations during previous mining. Coal rank ranges from semi-anthracite to the boundary between medium and low volatile bituminous coals. The majority of the coal resources are within a mean maximum reflectance range of 1.50 to 1.65%.

In-seam ash varies between 11% and 35%; in-seam sulphur varies between 0.30 and 0.70%.

4.2 Exploration and Sampling

The first exploration drilling on CST Coal coal leases dates to 1960. Since then a total of approximately 4,500 drill holes have been completed. Total approximate meterage of all the drilling to date is 500,000 m. Approximately 1 in 7 of these drill holes was sampled either by core, or reverse circulation methods. In addition CST Coal possesses data from 129 adits, most within lease area, but including some from surrounding areas of the Smoky River Coalfield.

While exploration drilling from the early phases of exploration, 1960’s and 1970’s was completed by a mix of rotary and diamond drilling methods, exploration since approximately 1990 has been nearly all by the air hammer rotary method, with sampling by wireline cores, and to a lesser degree, reverse circulation sampling. Generally bore hole sizes have been 6 inch or greater to accommodate the maximum suite of geophysical logging tools. All holes since 1990 have been logged with gamma, and either neutron or density, depending on whether hole conditions permitted open hole logging, or logging only through the drill pipe. Resistivity and dipmeter logging has been done in all holes, conditions permitting, and sonic logging in approximately 10% of holes where conditions permit.

Sample analysis has been done mostly by independent laboratories in the period since 1990. However, the onsite CST Coal laboratory was used utilized for analysis of exploration data in the period from 1970 to 1990. The onsite laboratory was certified to meet the ISO-9000 standard until the year 2000, and through its history has participated in round robin quality control checks.

Core sampling is the dominant source of coal quality data for coal resource areas. The friable nature of the coal requires short core runs of 1.5 m or less in coal seams. The individual runs are analyzed separately for ash, moisture and Free Swelling Index, and when composites are made of the complete seam, these composites are analyzed for Proximate, ash chemistry, Ultimate, rheological and petrographic character. Float sink and froth testing for washing characteristics, are done on full seam composite samples of the core runs, and sometimes on multi-core composites of the same coal seam.

Sample handing procedures and documentation has met industry standards through the history of exploration on CST Coal property.

5.0 Resources

Coal resources have only been updated in this statement to reflect the extraction of coal reserves in the No. 8 Mine West Extension Pit between April 1, 2021 and March 31, 2022. There were no changes to the other coal resource areas of No. 2 Surface, No. 9 Surface, No. 12 South B2 Surface, No. 12 North Surface, No. 16 Surface, No. 12 South B2 Underground, No. 12 South A Underground and No. 9 Underground.

5.1 Criteria used for Coal Resource Classification

Coal resource models are generated from the drill hole information generally on a cross-section by cross-section basis, where the cross-sections are perpendicular to the structural strike. Sectional interpretations are linked into 3D geometric models of the coal seam, which in turn are the input to the construction of 3D block models. Block models typically have the basic coal quality parameters of in-seam ash from composite cores, along with volatile matter, free-swelling index and sulphur. In-seam density is generated from an empirical formula which uses in-seam ash as the input.

From the 3D block models surface resources can be delimited by applying pit optimization methods to create pit shells at the limiting criterion of strip ratio. Underground resources are delimited using the criteria of seam dip, seam thickness and depth of overburden from a combination of the 3D geometric models and the 3D block models of the coal measures.

5.1.1 Surface Mineable Coal Resources

Surface mineable coal resources in this report were estimated based on criteria specified for coal deposits in Canada by the Canadian securities National Instrument 43-101. This document references Geological Survey of Canada Bulletin 88-21 as the guideline for determining confidence of existence and recovery criteria for coal deposits, based structural complexity, spacing of exploration data points, and the technical feasibility of coal recovery.

For the CST Coal Property the surface mineable coal resource areas are mostly in the “Complex” category of geologic structural style, whereby the deposit is both faulted and folded, with no large areas of flat lying coal measures. The coal thickness cutoff is 1 metre, or 1 metre of coal in a 2 metre zone. The technical limit is that part of the in-situ coal that can be mined by a conceptual pit with a 45 degree highwall, to a cutoff strip ratio of 20:1 BCM to in-situ tonnes.

Resource confidence is defined by the spacing of drilled section lines and the spacing of data points (drill holes for the most part) along those section lines. The section line method translates approximately to defining in-situ coal along strike 150 m and 100 m across strike from a data point is defined as in the measured confidence category, and in-situ coal tonnage between 150 and 300 m along strike and 200 m across strike from a data point is in the indicated confidence category. The one significant exception to these definitions is No. 2 Surface resource areas which has less complex geological structure and thus expands the distance for the confidence categories to 300 m from a data point for measured and 300 to 600 m from a data point for indicated resources.

On review of these criteria the Competent Person is satisfied that for the CST Coal property deposit type, the JORC Code 2012 rules for determining confidence of existence classes for a coal resource are satisfied by the criteria used in the 2021 and 2017 Coal Resource and Coal Reserve Statements, and carried forward to this report. Resource confidence categories for all underground and surface mining areas are shown on the map presented in Figure 2 of the Appendix.

5.1.2 Underground Mineable Coal Resources

The definition of underground mineable coal resource areas within the CST Coal Property is based on criteria taken from GSC Bulletin 88-21. The major difference between underground and surface coal resource areas is that most surface mineable coal resources are found where the deposit is of complex structural geology and most underground mineable coal resources are found where the deposit is of "moderate" structural complexity (as defined in GSC Bulletin 88-21).

The technical limits defining an underground coal resource are a minimum coal seam thickness of 1.5, a maximum depth of overburden of 600 m, and a maximum seam dip of 25 degrees. A practical limit applied to this deposit, but not specified by GSC Bulletin 88-21 is a maximum in-situ ash (dry basis) content of about 40%.

Underground resource areas are limited technically by seam dip when the mining method considered is room and pillar mining. In general this implies a "moderate" style of structural geology. This class of structure means the measured confidence category of resource is defined as 300 m from a data point, and the indicated confidence class as 300 to 600 m from a data point.

However, in cases where the seam dip is gentle but one or more significant faults cut the resource area, the resource is categorized as "complex" structurally speaking and underground resources are subject to the same resource confidence data point spacing as applies to surface resources. This applies to the No. 12 South A and No. 12 South B2 underground coal resource areas.

A table summarizing the resource confidence category definition by resource area is found in Section 7, the "JORC 2012 Table 1, Section 2" information supplement.

5.2 Statement of Previous Coal Resources

Table 5.1 Summary of Coal Resources, Measured, Indicated and Inferred, March 31, 2021

	Measured (Mt)	Indicated (Mt)	Inferred (Mt)	Total (Mt)	Raw Ash (% db)	Raw FSI
Surface Mining Area[(2)]						
No. 2 Area	61.4	23.2	6.3	90.9	26.6	5.0
No. 8 Area	33.2	7.4	0.7	41.3	23.0	4.9
No. 9 Area	38.2	70.6	27.5	136.3	21.9	5.0
No. 12 South B2 Area	2.6	1.0	0.5	4.1	14.4	3.1
No. 12 North Area	39.1	15.6	2.2	56.9	16.8	3.5
No. 16 Area	56.0	20.2	15.9	92.1	14.1	3.6
Total Surface Areas	230.5	138.0	53.1	421.6	20.6	4.5
Underground Area[(4)]						
No. 12 South B2 Area	2.7	5.2	-	7.9	13.9	3.0
No. 12 South A Area	25.3	39.5	3.3	68.1	14.9	3.0
No. 9 Area	108.2	33.6	20.1	161.9	21.7	5.0
Total Underground Area	136.2	78.3	23.4	237.9	19.5	4.4
Grand Total	366.7	216.3	76.5	659.5	20.2	4.4

5.3 Statement of Updated Coal Resources

Table 5.2 Summary of Coal Resources, Measured, Indicated and Inferred, March 31, 2022

	Measured (Mt)	Indicated (Mt)	Inferred (Mt)	Total (Mt)	Raw Ash (% db)	Raw FSI
Surface Mining Area[2]						
No. 2 Area	61.4	23.2	6.3	90.9	26.6	5.0
No. 8 Area	33.1	7.4	0.7	41.2	23.0	4.9
No. 9 Area	38.2	70.6	27.5	136.3	21.9	5.0
No. 12 South B2 Area	2.6	1.0	0.5	4.1	14.4	3.1
No. 12 North Area	39.1	15.6	2.2	56.9	16.8	3.5
No. 16 Area	56.0	20.2	15.9	92.1	14.1	3.6
Total Surface Areas	230.4	138.0	53.1	421.5	20.6	4.5
Underground Area[4]						
No. 12 South B2 Area	2.7	5.2	-	7.9	13.9	3.0
No. 12 South A Area	25.3	39.5	3.3	68.1	14.9	3.0
No. 9 Area	108.2	33.6	20.1	161.9	21.7	5.0
Total Underground Area	**136.3**	**78.3**	**23.4**	**238.0**	**19.5**	**4.4**
Grand Total	366.6	216.3	76.5	659.4	20.2	4.4

Notes:

(1) Quality of all resources classified as Low Volatile Bituminous (ASTM).

(2) Surface mining resources are based on a 20:1 strip ratio cut-off and a 45-pit wall angle.

(3) No.12 South B2 surface resources are those remaining after the open pit reserves have been mined out.

(4) Underground resource estimated by CST Coal staff. Minimum depth of cover approx. 50 m. Maximum underground extraction angle 30°; 20m buffer from faulting, 50m buffer from high walls.

(5) Coal resources are inclusive of the coal reserves.

(6) The updated resource estimates are effective March 31, 2022, and have been prepared and/or reviewed by Brian Klappstein, P. Geo., Alberta Association of Engineers and Geoscientists, and Competent Person.

(7) Rounding as required by reporting guidelines may result in apparent summation differences.

6.0 Coal Reserves

Coal Reserves have been updated to reflect mining in the No. 8 Mine West Extension Pit (West 1 and West 2 Sub-phases) between April 1, 2021 and March 31, 2022. No new exploration has been conducted in the period since the last reserve verification in any mine area of the CST Coal Property. Other reserve areas, No. 2 Mine and No. 12 South have not been updated since the last independent third party reserve estimate dated to December 31, 2017. This verification of reserves used a projected selling price in US$ and exchange rate of US$ to CDN$ which were not materially different than realized selling price in US$ and exchange rate of metallurgical coal sold by CST Coal Canada Limited in the fiscal year ending March 31, 2022.

In addition, realized stripping ratio, washing yields, external costs of transportation, royalties, and taxes rates, including carbon levies are not materially different from key economic parameters used in the last reserves verification.

A comparison of forecast mining performance versus achieved metrics is not possible for the FY 2022 as the operation in this period was for less than 5 months and impacted by the ramp up of the workforce. Thus this reserve update does not include an updated cash flow analysis.

6.1 Criteria used for Coal Reserve Classification

The most basic rule used in this statement for conversion of resources into reserves is that measured resources that meet the Modifying Factors criteria for defining a reserve convert to Proven Reserves and that indicated resources convert to Probable Reserves. No inferred resources are included in the defined reserves.

The method for converting both surface and underground mineable resources into resources varies by mine area, but the majority of the reserve base of the CST Coal Property is based on technical mine design parameters, productivity assumptions, processing performance, unit costs achieved, and regulatory limitations realized and experienced historically on the CST Coal Property.

No mine area on the CST Coal Property required a reserve update, except for the No. 8 Mine. For No. 8 Mine there were no substantive changes to the pit design used for the calculating reserves for this report. It is based on economic, regulatory, and geotechnical considerations incorporated in previous reserve statements, and considered to have not materially changed during the period of this reserve update. Thus the reserve update is based only on a calculation of reserves remaining within the permitted No. 8 Mine LOM pit after mining activity in the FY 2022.

6.1.1 Surface Coal Reserves

As noted this report uses reserves criteria unchanged from previous Coal Resource and Coal Reserve Statements. Following is comment on the principles of those statements.

No 8 Mine costs and productivity have been generated using a first principles model. All other surface reserve calculations are based on unit costs and productivity assigned based on historical data, converted into $CDN.

Pit designs are based on optimized COSR’s that reflect the haul distance to the process plant, the geotechnical limitations of highwall and footwall design by resource areas. Capital area by area is calculated

based on road development, tree clearing, coversoil stripping, powerline construction, and water management infrastructure requirements unique to each surface mining resource area.

In general loading unit productivity and hourly equipment costs are fixed with haul cycle times the most variable component is the floating component of surface mining. Haul cycle time estimates are done by pit by bench.

Overheads based on historically achieved annual basis costs.

6.1.2 Underground Coal Reserves

Underground reserve definition starts out with detailed mine layouts, the primary considerations for design being pillar size based on overburden depth in conjunction with coal seam thickness and maximum dip and cross-pitch along roadways.

The cost model for underground reserves is based on empirically derived unit costs and productivity for machine groups engaged in either road development or depillar operations. Roof support costs are based on designs which input roof strength estimates based on geotechnical analysis.

Overheads, including ventilation, costs are based on historically achieved costs on an annual basis.

6.2 Run of Mine Basis

Run-of-mine (ROM) reserve estimates are based on dilution and loss formulas generated from back analysis of previous surface and underground mining operation in-situ tonnages and ROM production streams. In-pit trench sampling, continuous ROM sampling and reconstruction of actual in-seam volumes mined in FY 2022 are consistent with ROM modelling parameters used in this and the 2021 Coal Resource and Coal Reserve Statement.

6.2.1 Statement of Previous Run-of-Mine Coal Reserves

Table 6.1 Summary of ROM Coal Reserves, Effective March 31, 2021

Coal Reserves				Coal Quality		
	Proven (Mt)	**Probable (Mt)**	**Total (Mt)**	**ROM Ash (db)**	**ROM FSI**	**ROM VM (db)**
Surface Mining Area[(2)]						
No. 2 Area	12.1	1.1	13.2	27.1	5.9	16.8
No. 8 Area	10.2	0.1	10.3	24.7	5.0	17.1
Total Surface Areas	22.3	1.2	23.5	26.0	5.5	17.0
Underground Area[(4)]						
No. 12 South B2 Area	2.3	1.1	3.4	22.1	3.5	15.3
No. 12 South A Area	4.8	9.9	14.7	22.3	3.8	14.9
Total Underground Area	7.1	11.0	18.1	22.3	3.7	14.9
Grand Total	29.4	12.2	41.6	24.4	4.7	16.1

6.2.2 Statement of Updated Run-of-mine Coal Reserves

Table 6.2 Summary of ROM Coal Reserves, March 31, 2022

Coal Reserves				Coal Quality		
	Proven (Mt)	Probable (Mt)	Total (Mt)	ROM Ash (db)	ROM FSI	ROM VM (db)
Surface Mining Area[2]						
No. 2 Area	12.1	1.1	13.2	27.1	5.9	16.8
No. 8 Area	10.0	0.1	10.1	24.3	4.7	17.1
Total Surface Areas	22.1	1.2	23.3	25.9	5.4	17.0
Underground Area[4]						
No. 12 South B2 Area	2.3	1.1	3.4	22.1	3.5	15.3
No. 12 South A Area	4.8	9.9	14.7	22.3	3.8	14.9
Total Underground Area	7.1	11.0	18.1	22.3	3.7	14.9
Grand Total	29.2	12.2	41.4	24.3	4.7	16.1

Notes:

(1) The mineral tenure of the Coal Reserves is 100% held by CST Coal.

(2) Quality of all reserves classified as Low-Volatile Bituminous (ASTM).

(3) Average ROM coal quality for reserves is a weighted average of multiple seams and pits, and hence FSI average not necessarily equal to reporting increments for the FSI metric.

(4) Underground ROM estimates include mining recoveries ranging from 44% to 62%, which are inherent to multi-seam room-and-pillar operations.

(5) Both underground and surface mineable estimates include allowance for loss and dilution and are supported by empirical formulas derived from previous mining experience.

(6) The surface reserve estimates do not include thermal coal consistent with previous CST Coal property Technical Reports.

(7) The surface reserve estimates are effective March 31, 2022, and have been prepared or reviewed by Brian Klappstein, P. Geo., Alberta Association of Engineers and Geoscientists, and Competent Person.

(8) The underground reserve estimates are effective March 31, 2022, and have been reviewed by Brian Klappstein, P. Geo., Alberta Association of Engineers and Geoscientists, and Competent Person.

(9) Rounding as required by reporting guidelines may result in apparent summation differences

6.3 Marketable Basis

Different grades metallurgical coal have historically been sold from the CST Coal Property, including PCI or pulverized coal injection, but the great majority of sales have been a relatively low ash, low sulphur, high coke yield, relatively low coking pressure, low volatile hard coking coal.

The marketable reserve is based on cash flow analysis which assumes the selling price for the CST Coal product is between 9 and 15% below the benchmark price for premium sea-borne low-volatile hard coking coal sold in the Pacific Rim. The difference between the actual selling price realized in FY 2021 for spot basis coal sales and the selling price in $CDN used in the cash flow analysis presented in the 2017 Coal Resource and Coal Reserve Statement was not judged to materially affect the 2017 valuation.

The marketable reserve does not include the near surface coal which has been oxidized by groundwater flux, which is generally between 5 and 10 metres below the top of bedrock.

6.3.1 Statement of Previous Marketable Coal Reserves

Table 6.3 Summary of Marketable Coal Reserves, March 31, 2021

Coal Reserves				Coal Quality		
	Proven (Mt)	**Probable (Mt)**	**Total (Mt)**	**ROM Ash (db)**	**ROM FSI**	**ROM VM (db)**
Surface Mining Area[(2)]						
No. 2 Area	8.2	0.7	9.0	8.5	8.6	19.3
No. 8 Area	7.0	0.1	7.1	8.5	7.0	18.7
Total Surface Areas	15.3	0.8	16.1	8.5	7.9	19.0
Underground Area[(4)]						
No. 12 South B2 Area	1.9	0.9	2.8	8.5	5.1	17.1
No. 12 South A Area	3.5	7.1	10.6	8.5	4.8	16.6
Total Underground Area	5.4	8.0	13.4	8.5	4.9	16.7
Grand Total	20.6	8.8	29.5	8.5	6.5	18.0

6.3.2 Statement of Updated Marketable Coal Reserves

Table 6.4 Summary of Marketable Coal Reserves, March 31, 2022

Coal Reserves				Coal Quality		
	Proven (Mt)	**Probable (Mt)**	**Total (Mt)**	**ROM Ash (db)**	**ROM FSI**	**ROM VM (db)**
Surface Mining Area[(2)]						
No. 2 Area	8.2	0.7	9.0	8.5	8.6	19.3
No. 8 Area	6.9	0.1	7.0	8.5	7.0	18.8
Total Surface Areas	15.2	0.8	16.0	8.5	7.9	19.0
Underground Area[(4)]						
No. 12 South B2 Area	1.9	0.9	2.8	8.5	5.1	17.1
No. 12 South A Area	3.5	7.1	10.6	8.5	4.8	16.6
Total Underground Area	5.4	8.0	13.4	8.5	4.9	16.7
Grand Total	20.5	8.8	29.4	8.5	6.5	18.0

Notes:

(1) Quality of all reserves classified as Low-Volatile Bituminous (ASTM).

(2) Total coal will be marketed as hard coking coal.

(3) Reserves are 100% held by CST Coal Canada Limited

(4) Marketable coal from Table 14.4 considers a yield of 69% based on the historic average plant yield from No. 7 and No. 12 South B2 mines.

(5) Plant yield for the surface mineable coal varies in relation to the ROM ash content:

Plant Yield = (ROM Ash%-Plant Reject Ash%)/ (Clean Coal Ash%-Plant Reject Ash%), where Plant Reject Ash

= 55% to 63% depending on mine area and seam and Clean Coal Ash = 8.5%.

(6) Marketable (Clean) coal reserves are a subset of and not additive to Run-of-Mine reserves.

(7) The surface reserve estimates do not include thermal coal consistent with previous CST Coal Canada property Technical Reports.

(8) The surface reserve estimates are effective March 31, 2022, and have been prepared or reviewed by Brian Klappstein, P. Geo., Alberta Association of Engineers and Geoscientists, and Competent Person.

(9) The underground reserve estimates are effective March 31, 2022, and have been prepared or reviewed by Brian Klappstein, P. Geo., Alberta Association of Engineers and Geoscientists, and Competent Person.

(10) Rounding as required by reporting guidelines may result in apparent summation differences.

7.0 JORC Code 2012

Table 7.1 JORC Code, 2012 Edition

7.1 Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.*	• Exploration sampling has been primarily by coring, mostly 3.5 inch core size. Core runs generally are less than 1.5 m, to obtain the best core recovery • In addition, reverse circulation samples have been collected, sampling every 1 to 2 m of coal seams intersected. • Most of the resource areas include open pits, both in progress, and completed, and surveyed hand cut and sampled trenches from the pit floor supplement the exploration drilling, primarily to define the extent of near surface oxidized coal. Sampling interval of these trenches has generally been every 1 to 2 m of trench length. • The ratio of coal quality sampled drill holes, via reverse circulation, or coring, to non-sampled drill holes, is approximately 1:7.
Drilling techniques	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	• Drilling methods have included both diamond and rotary; the dominant method has been downhole air hammer drilled rotary holes, generally +6 inches in diameter to facilitate a wide range of downhole geophysical tools, and wireline core diameters.

Criteria	JORC Code explanation	Commentary
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	• Core is measured in split barrels after being wireline retrieved. Drillers record start and stop depths of a run and geologists or drillers record the measured length from the barrel or box of the same run. Runs are stored in core boxes separated by markers with depth notated. • Core runs are generally limited to 1.5 m per run to maximize the recovery of the coal which is sheared and friable in-situ. • Historical regression analysis of ash by seam against recovery indicates that the higher ash material in the coal seam is more likely to have poor recovery due to shearing occurring preferentially in the higher ash zones of a coal seam.
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	• Logging of coal seams consists of photographing the core in box or split barrel after retrieval, measuring length, describing coal macerals and partings, which may be sampled separately if thicker than 10 cm., and bagging by core run for initial raw state laboratory assay. Logging is qualitative for coal cores • Logging of rock cores for the purposes of rock strength determination includes both qualitative (lithology) and quantitative (RQD methods). • All exploration drill holes except for pre-1980, and those where hole conditions did not permit getting a wireline tool to bottom have been geophysically logged, with a minimum suite of gamma, density, and resistivity. Poor condition drill holes are logged from inside the pipe with gamma, neutron where possible. Wireline dipmeter, and sonic logging have been also done extensively since approximately 1995.

Criteria	JORC Code explanation	Commentary
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• Core is not split, reserves are kept only of composites made from individual core runs, but only until a complete review of assay results by composite is complete, and they are then discarded. • Individual core runs are only assayed in the raw state; float sink and other washability testing is done on composites, generally for the full seam. • Reverse circulation samples are mostly assayed only in the raw state. • Representative composites are made by sub-sampling individual core runs such that each core run has the effective in-situ weight recovery of the poorest recovery core run within a seam or zone to be composited.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	• All coal quality laboratory testing is done to ASTM standards; generally by an external contract laboratory, although much historical assay testing was by the property onsite internal laboratory. • More complex laboratory procedures like ash chemistry analysis and petrographic analysis have always been done by external contract laboratories.

Criteria	JORC Code explanation	Commentary
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• Although not currently ISO9000-certified, the onsite internal laboratory was formerly ISO9000 compliant and participated in round robin checks of analytical accuracy. This was during the historical period when, when the internal laboratory was used for basic coal quality testing of exploration samples. • Data entry of historical assay results has been done mostly manually but also in bulk, using scanning and optical character recognition techniques.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• Historically drill hole collars were surveyed with total station survey equipment and more recently high precision GPS equipment, both an approximate accuracy minimum of 5 decimeters. • Downhole surveys using magnetic north referenced wireline tools has been done approximately since 1990 except where hole conditions did not permit. • All data surveyed in historical mine grid systems have been converted to the Nad83 Zone 11 UTM grid coordinates using spreadsheet methods. • Primary topographic data is updated by aerial LiDAR mapping on an annual basis. The active mining areas have been updated weekly by GPS ground surveying of excavation advances and coal seam boundaries for open pit mines, and by total station surveying for underground mines.

Criteria	JORC Code explanation	Commentary
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	• In structurally complex areas, exploration drill holes are spaced between 60 and 120 m (section line spacing) along structural strike, and between 50 and 20 m across strike, measured at the major coal seam (most drill holes are angle drilled in open pit mineable resource areas). • In less complex areas (mainly underground mineable resource areas), the spacing is approximately 300 m along strike and 100 m across strike (most holes are vertical). • These drill hole spacing ranges are adequate to define coal to the measured resource category depending on the level of coal seam structural complexity in the resource areas. • No compositing has been applied above the level of an individual coal seam in an individual drill hole.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	• The exploration spacing reflects the structural anisotropy, whereby changes along strike are much more gradual than across strike for metrics like seam thickness and in-seam ash content.
Sample security	• *The measures taken to ensure sample security.*	• Sample handling of core, trench and reverse circulation samples is to industry standards for logging, tagging, transporting, and analysis phases of the assay process.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• The sampling techniques used historically and currently have been reviewed by numerous 3rd party technical experts and reported under the Canadian National Instrument 43-101 securities standard for defining resources and reserves.

7.2 Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• CST Coal Canada Limited (CST Coal) holds 100% ownership of 25 coal mineral leases, totalling 29,968 Hectares. These are issued by Alberta Energy and have 15 year terms, renewable at the discretion of the owner. • These leases are held wholly within a provincial government land use policy zone which in principle allows both coal exploration and development, for both underground and open pit mining methods. • Following is a list of coal leases currently held by CST Coal:
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• CST Coal holds an exploration database dating back to 1960, with hardcopy and digital information of historical exploration data including trenches, adits, drill holes, pilot plant wash studies, and pilot coke oven testing, completed by previous owners of the CST Coal Property.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The deposit type is a foothills thrust and fold belt, Cretaceous in age, consisting of multiple low volatile coal seams in a mostly non-marine sedimentary sequence of mudstones, siltstones and sandstones. • Coal seams typically are structurally thickened by both faulting and folding. • All seams of economic thickness, ash content and continuity are within the Grande Cache Member of the Gates Formation within the Lower Cretaceous Luscar Group. • The CST Coal Property is part of a larger deposit known in government and literature as the Smoky River Coalfield.

Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:*
	  ○ *easting and northing of the drill hole collar*
	  ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*
	  ○ *dip and azimuth of the hole*
	  ○ *down hole length and interception depth*
	  ○ *hole length.*
	• *If the exclusion of this information is justified on the basis that*
		• A total of 4,318 exploration drill holes have been completed within the coal lease areas held by CST Coal, beginning in 1960.
		• Total meterage drilled to date is 508,976.
		• While it is not feasible to tabulate this massive exploration drill hole database in this document, the following table provides a summary of exploration completed by different owners and partners since 1960.

Criteria	JORC Code explanation	Commentary
	the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	**Exploration Drilling CST Coal Mineral Leases** **Columbia Iron Ore Company**: Year Start 1960, Year end 1962, Holes 50, Drilled Metres 8,136 **McIntyre Mines**: Year Start 1969, Year end 1984, Holes 1,441, Drilled Metres 158,750 **Smoky River Coal Limited**: Year Start 1985, Year end 1999, Holes 2,106, Drilled Metres 240,481 **Grande Cache Coal LLP**: Year Start 2001, Year end 2014, Holes 721, Drilled Metres 101,609 **Totals**: Holes 4,318, Drilled Metres 508,976 **Columbia Iron Ore Company**: All cored diamond holes, no geophysics **McIntyre Mines**: Mostly rotary, basic gamma, resistivity logging, limited verticality, reverse circulation sampling & cores **Smoky River Coal Limited**: Mostly rotary, verticality, gamma, density, dipmeter, wireline coring, some sonic logging **Grande Cache Coal LLP**: Mostly rotary, rock and coal wireline coring, full geophysics log suite, some sonic, some neutron through the pipe
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent*	• Full seam composites made from core runs are calculated using either the actual laboratory composite of the individual runs, pro-rated by run recovery, or mathematically using density vs ash formulas to generate the weight factor for each run for all coal quality metrics.

Criteria	JORC Code explanation	Commentary
	values should be clearly stated.	
Relationship between mineralization widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	• Coal seam thicknesses, where used in block modelling calculations, or reported in previous Coal Resource and Coal Reserve Statements, are calculated true thicknesses, based on the averages of multiple drill holes, where drill holes have true stratigraphic thickness calculated using the intersected thickness and the angle the drill hole penetrates a three dimensional model constructed of the coal seam.
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	• A tabulation of all intercepts used to construct geometric and block models used in coal resource estimations is not feasible to present here given the large number of drill holes. A summary of coal seam thickness by mine area is provided (the average thickness is a reasonable approximation of the true stratigraphic thickness absent of structural thickening or thinning):

Criteria	JORC Code explanation	Commentary

		Project Area					
Coal Seam	Metric	No. 2	No. 8	No. 9	No. 12 South	No. 12 North	No. 16
No. 11	Min.	0.5	0.2	0.3			
No. 11	Max.	4.6	9.8	4.4			
No. 11	Avg.	2.3	2.7	2.1			
No. 10	Min.	0.3	0.4	0.1			
No. 10	Max.	6.7	10.2	12.6			
No. 10	Avg.	2.6	3.8	3.4			
No. 8	Min.					0.3	0.3
No. 8	Max.					15.6	15.9
No. 8	Avg.					1.4	2.2
No. 7	Min.				0.5	0.2	0.4
No. 7	Max.				22.5	8.4	18.5
No. 7	Avg.				4.5	2.7	2.8
No. 6	Min.				0.4	0.3	0.2
No. 6	Max.				3.3	10.4	9.6
No. 6	Avg.				1.3	1.7	1.5
No. 5	Min.				0.2	0.3	0.3
No. 5	Max.				6.1	5.5	5.8
No. 5	Avg.				1.6	1.6	1.8
No. 4	Min.	1.2	0.1	0.1	0.3	0.3	0.3
No. 4	Max.	24.2	50.7	31.2	25.8	28.3	30.1
No. 4	Avg.	6.9	7.8	6.3	7.5	6.8	6.8
No. 3	Min.					<0.5	
No. 3	Max.					4.7	
No. 3	Avg.					1.3	
Note:	Min. & Max. represent intersections where the seam structured						
Note:	Avg. coal seam thickness is a reasonable approximate of the stratigraphic seam thickness						
Note:	Seam numbers 5 to 8 are present in No. 8 Mine, but as thin high ash coal zones						
Note:	Seam numbers 10 is present in 12 South as a very high ash carbonaceous zone						
Note:	Seam number 3 is present across all mine areas, in the form of a carbonaceous shale zone						

Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	• A complete tabulation of all Exploration Results from 1960 onward is not feasible for this property, which has a total of approximately 600 drill holes sampled for a range of proximate, chemical, rheological, petrographic and washability analyses. A summary of basic coal quality parameters, averages of cores, by seam, by resource area is provided:

Criteria	JORC Code explanation	Commentary

Resource Area	Coal Seam	Ash (db)	FSI	VM (db)
No. 2	No. 4	17.9	7.0	17.5
No. 2	No. 10	28.0	3.5	18.8
No. 2	No. 11	29.0	3.5	22.4
No. 8	No. 4	17.3	5.0	17.2
No. 8	No. 10	20.7	4.5	19.0
No. 8	No. 11	30.0	5.5	16.8
No. 9	No. 4	14.8	5.5	16.9
No. 9	No. 10	17.6	6.0	17.7
No. 9	No. 11	32.7	7.5	20.8
No. 12 South A	No. 4	12.3	4.0	17.0
No. 12 South A	No. 5	13.4	4.5	17.0
No. 12 South A	No. 6	18.3	5.0	19.0
No. 12 South A	No. 7/8	15.3	4.0	18.0
No. 12 South B2	No. 4	12.3	3.0	16.4
No. 12 South B2	No. 5	14.5	4.0	16.9
No. 12 South B2	No. 6	15.8	5.5	16.6
No. 12 South B2	No. 7/8	22.1	4.0	17.0
No. 12 North	No. 4	13.8	3.0	16.3
No. 12 North	No. 5	14.6	3.5	17.7
No. 12 North	No. 6	34.2	1.0	15.7
No. 12 North	No. 7	16.8	5.0	17.4
No. 12 North	No. 8	15.6	5.5	19.0
No. 16	No. 4	13.2	3.0	18.0
No. 16	No. 5	15.3	4.5	17.0
No. 16	No. 6	22.3	3.0	17.0
No. 16	No. 7	16.4	3.5	18.0
No. 16	No. 8	15.6	5.5	19.0

Note: Raw, in-situ coal quality, dry basis (db), averages of cores

Criteria	JORC Code explanation	Commentary
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	• Data which have aided structural geology interpretations include outcrops mapped for dip and strike across the CST Coal Property, and in the No. 9 Resource Area, four shallow reflection seismic lines. • Pilot coke oven testing of the various coal seams in the various resource areas, has been done for all resource areas except for No. 16 and No. 12 North, including blends of different mine areas and seams, confirming the hard coking designation applied to most seams in most areas.
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• Planning and costing of an infill exploration program in the No. 2 Resource Area was completed in 2018. All exploration costs including road and drill pad construction, drilling, geophysical logging, and sampling for both coal quality and rock quality, total $9.6M CDN for a planned 210 holes (35,000 metres). A first stage of this program, totalling $2.9M is tentatively scheduled for calendar year 2022.

7.3 Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in Section 1, and where relevant in Section 2, also apply to this section)

Criteria	JORC Code explanation	Commentary
Database integrity	• *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.* • *Data validation procedures used.*	• The exploration drill hole database, dating back to 1960, went through a process of quality checking and consolidation in 2012. During this process, conducted by an independent consulting firm, drill hole collars were converted from assorted historical mine grids, and the converted coordinates were checked for reasonable elevation differences against original ground topographic surfaces made by either Lidar surveys or photogrammetry. At the same time the historical coal seam picks in the database, for areas that had not already been mined out, was checked against geophysical logs. This process covered drilling to 2012 for No. 8, No. 2, No. 12 South, No. 12 North and No. 16 Resource Areas. • In 2014, the same process was applied to the No. 9 Resource area. • During the period from 2012 to 2014 a digital library was created of geophysical logs and drillers logs from hardcopy information which had hitherto been stored in cabinets onsite. This digital database, 3.5 GB in size, enables rapid cross-checking of any perceived anomalies in seam thickness, or depth encountered during the geological model construction process.
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	• The Competent Person currently works onsite for CST Coal, and is well familiar with the methods that have been used historically to locate, survey, sample and mark exploration locations, having worked on the property in the exploration department since 1986.
Geological interpretation	• *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* • *Nature of the data used and of any assumptions made.* • *The effect, if any, of alternative interpretations on Mineral Resource estimation.* • *The use of geology in guiding and controlling Mineral Resource estimation.* • *The factors affecting continuity both of grade and geology.*	• The geological interpretation is based on drilling along section lines perpendicular to structural strike, with the drill hole spacing between lines, and along having been refined based on both open pit and underground mining experience dating back to 1972 and 1969 respectively. • Coal seam continuity in both thickness and character is good, with the main seam, No. 4, continuous for 35 km along strike and 15 km across strike, varying between 4 and 8 metres of true stratigraphic thickness. • While the thinner coal seams are not as continuous as No. 4 Seam, stratigraphic thickness within the individual resource areas does not vary generally by more than 30%. • Stratigraphic pinch outs of coal seams, and washouts of coal seams by

<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr><td></td><td></td><td>channel sands are very rare.
• The primary coal quality metrics of in-situ ash, sulphur, and coal rank do not vary significantly by seam within a resource area.
• Coal rank trends on the CST Coal Property are well understood, with coal rank generally increasing from southeast to northwest, and decreasing up stratigraphic section.
• Structural geology is the characteristic of the deposit with the lowest confidence attributed to it, and drill hole spacing is primarily driven by the objective of defining faulting and folding of the coal measures.
• Geological models are constructed along drilled cross-section lines, first as 3D wireframe models, and then interpolated with quality parameters into block models of coal volume, density and quality.
• Coal seam thickness, quality, and washing yield in conjunction with mining limitations of strip ratio and wall angle in the case of open pit mining, and seam depth and seam dip in the case of underground mining, define the resources within the different areas of the CST Coal Property.</td></tr>
<tr><td>Dimensions</td><td>• The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.</td><td>• There are three underground resource areas, and five open pit resource areas within the CST Coal Property boundary with approximate dimensions as follows:
<table>
<tr><th>Coal Resource Area</th><th>Strike Length</th><th>Average Width</th><th>Coal Seams</th><th>Min. Depth</th><th>Max. Depth</th></tr>
<tr><td></td><td>metres</td><td>metres</td><td>Number</td><td>metres</td><td>metres</td></tr>
<tr><td>No. 2 Surface</td><td>2,500</td><td>3,500</td><td>4,10,11</td><td>0</td><td>700</td></tr>
<tr><td>No. 8 Surface</td><td>3,600</td><td>900</td><td>4,10,11</td><td>0</td><td>300</td></tr>
<tr><td>No. 9 Surface</td><td>5,300</td><td>900</td><td>4,10,11</td><td>0</td><td>350</td></tr>
<tr><td>No. 9 Underground</td><td>9,500</td><td>2,200</td><td>4,10,11</td><td>0</td><td>550</td></tr>
<tr><td>No. 12 South A Underground</td><td>4,100</td><td>800</td><td>4,5,6,7</td><td>0</td><td>400</td></tr>
<tr><td>No. 12 South B2 Underground</td><td>1,300</td><td>500</td><td>4,5,6,7,8</td><td>0</td><td>250</td></tr>
<tr><td>No. 12 North Surface</td><td>6,200</td><td>500</td><td>4,5,6,7,8</td><td>0</td><td>250</td></tr>
<tr><td>No. 16 Surface</td><td>7,900</td><td>800</td><td>4,5,6,7,8</td><td>0</td><td>250</td></tr>
</table>
</td></tr>
<tr><td>Estimation and modelling techniques</td><td>• The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of</td><td>• Wireframe models of each coal seam are constructed by cross-section by cross-section, perpendicular to strike using MineSight© modelling software. Sectional polygonal interpretations of coal seams are then linked into a continuous 3D geometry model for the strike length of the resource area.
• Spacing of the interpreted cross-sections varies between 60 m for</td></tr>
</table>

Criteria	JORC Code explanation	Commentary
	computer software and parameters used. • *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.* • *The assumptions made regarding recovery of by-products.* • *Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).* • *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* • *Any assumptions behind modelling of selective mining units.* • *Any assumptions about correlation between variables.* • *Description of how the geological interpretation was used to control the resource estimates.* • *Discussion of basis for using or not using grade cutting or capping.* • *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*	intensely structured open pit resource areas to 300 m for gently structured underground mining areas. • Coal seam models are constructed above topography and then clipped to a model of the bedrock surface • Clipped 3D geometric models of the coal seams, are intersected with block models, aligned also along strike, with individual block sizes in the range of 15x15x15 m to 10x10x7.5 m. • Coal quality parameters are interpolated from core data points into the block model using inverse distance, or inverse distance squared interpolation methods. • The search limit for data points used for interpolating coal quality parameters is an ellipsoid, generally where the long axis is parallel to strike, the short axis is vertical and the intermediate axis is horizontal and perpendicular to strike. The long axis ranges between 300 and 1000 m. • Seams are chosen for inclusion in the coal resource calculation based on thickness and average ash criteria, but no in-seam ash, or yield cut-offs are applied once a seam is chosen as being of economic thickness and average ash. • Models are validated visually, seam by seam, by viewing heat maps of coal quality parameters overlaid on those blocks which intersect that coal seam, including ash, volatile matter, free-swelling index, and by cross-checking volumes summed from intersected blocks against the original volume of the 3D geometric model.
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	• Tonnages are estimated on a wet basis, in situ, using an empirical formula which estimates in-situ density from the dry basis ash content from interpolations and sampling. This empirical formula was a regression of ash (dry basis) against density (wet basis). However, the samples tested were raw core or lump samples where the moisture is consistently in the range of 4 to 5%. Hence the formula calculates in-situ density on a wet basis.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	• The geology cut-off parameters are in-seam ash and coal seam thickness. The framework for using the thickness parameters to delineate resources by coal seam is from the Geological Survey of Canada Bulletin 88-21 “A Standardized Coal Resource/Reserve Reporting System for Canada”. This document is specified by the Canadian securities regulators as a guideline for calculating coal resources when reporting under the

Criteria	JORC Code explanation	Commentary
		National Instrument 43-101. • The cut-off for an underground mineable coal seam is 1.5 metres thick in the "moderate" class of structural geology which is applicable to the structural style of the Smoky River Coalfield where underground resources are found. • The cut-off for an open pit mineable coal seam in "complex" class structural geology is 1 metre of coal in a zone of coal and rock splits which is no thicker than 2 m (1:1 ratio of coal to rock by volume). • Using in seam ash as a cut-off parameter for delineating a coal resource is not specified in the GSC Bulletin 88-21, as this is essentially an economic parameter, being the primary consideration in the estimation of the yield of a marketable product. However, in practice coal seams with in-situ ash contents of greater than approximately 40% have not been modelled as coal resource inputs.
Mining factors or assumptions	• *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	• The two technical factors which are used to delineate coal seams as an open pit resource are cut-off strip ratio (COSR) and highwall angle. The former is defined in GSC Bulletin 88-21 as 20:1 bank cubic metres (BCM) of waste rock per in-place tonne of coal. • The highwall angle used to calculate the COSR of an open pit resource is 45 degrees, based on sustainable pit wall highwalls constructed by previous open pit mines on the property. • The technical limits to a potential underground coal resource are a seam dip maximum of 25 degrees and depth of burial maximum of 600 m. The former is based on previous room and pillar mining operational limits experienced on the property, and the latter is defined in GSC Bulletin 88-21.
Metallurgical factors or assumptions	• *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	• Not applicable; processing limitations are not used to delineate coal resources on the CST Coal property.

Criteria	JORC Code explanation	Commentary
Environmental factors or assumptions	• *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	• Not applicable; environmental limitations have not been used to delineate coal resources on the CST Coal Property.
Bulk density	• *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* • *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.* • *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	• Bulk density of in-situ coal resources is based on the empirical formula Density = -206.2 / (Ash % (db) – 163.2), where ash is expressed as the percent number (1 to 99). • The empirical relationship for was derived from non-linear regression of density (wet) vs ash (db) from lump immersion testing. These samples typically retain the in-situ moisture of 4 to 5%. • The empirical relationship of density versus ash (db) has been cross-checked using the response of downhole geophysics, specifically compensated density tools run over cored intervals analyzed for ash (db). • The density of the shales, siltstones and sandstones which contribute dilution and therefore tonnage, is estimated to average 2.48 g/cc, based on both density measured in geotechnical rock core samples, and the response of the wireline geophysics compensated density tool. • The clastic rocks which make up the rock mass are in general very tightly cemented with minimal porosity. The rock mass is extensively jointed but joints are infilled with quartz and sometimes calcite mineralization and even in the most intensely structured zones, porosity is minimal.
Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.* • *Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).* • *Whether the result appropriately reflects the Competent*	• Classification criteria for defining coal resources as measured, indicated or inferred confidence of existence categories, has not been changed since the last third party Coal Resource and Coal Reserve Statement on the CST Coal Property (period ending December 31, 2017, dated February 15, 2018, available at: http://doc.irasia.com/listco/hk/cstgroup/circulars/c180307.pdf). • These criteria are based substantially on the criteria specified in the Geological Survey of Canada Bulletin 88-21. These criteria have been

<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr><td></td><td>Person's view of the deposit.</td><td>strictly applied in No. 9 open pit and underground and the No. 12 South A and B2 underground coal resource areas. The No. 2, No. 8, No. 12 North and No. 16 open pit coal resource areas have been delineated by a method which is very close to and a reasonable facsimile of the GSC 88-21 method.
• In the judgement of the Competent Person these criteria, are appropriate definitions of measured, indicated and inferred resource areas on the CST Coal Property.
• Criteria, in detail, by mine area, are provided as follows:
<table>
<tr><th rowspan="2">Resource Area</th><th rowspan="2">Structural Geology Class</th><th rowspan="2">Criteria</th><th colspan="3">Confidence Class</th></tr>
<tr><th>Measured</th><th>Indicated</th><th>Inferred</th></tr>
<tr><td>No. 2 Surface</td><td>Moderate</td><td>Distance from nearest data point</td><td>0-300 m</td><td>300-600 m</td><td>600-2400</td></tr>
<tr><td>No. 8 Surface</td><td>Complex</td><td>Distance from nearest data point</td><td>0-100m</td><td>100-200m</td><td>200-400m</td></tr>
<tr><td>No. 9 Underground</td><td>Moderate</td><td>Distance from nearest data point</td><td>0-450 m</td><td>450-900 m</td><td>900-2400 m</td></tr>
<tr><td>No. 9 Surface</td><td rowspan="4">Complex</td><td>Cross-section spacing</td><td>150 m</td><td>300 m</td><td>600 m</td></tr>
<tr><td>No. 12 South A UG</td><td>Minimum number of data points per</td><td>3</td><td>3</td><td>3</td></tr>
<tr><td>No. 12 South B2 UG</td><td>Mean data point spacing along sectio</td><td>100 m</td><td>200 m</td><td>400 m</td></tr>
<tr><td></td><td>Maximum data point spacing along se</td><td>200 m</td><td>400 m</td><td>800 m</td></tr>
<tr><td>No. 12 North Surface</td><td>Complex</td><td>Distance from nearest data point</td><td>0-100m</td><td>100-200m</td><td>200-400m</td></tr>
<tr><td>No. 16 Surface</td><td>Complex</td><td>Distance from nearest data point</td><td>0-100m</td><td>100-200m</td><td>200-400m</td></tr>
</table>
•</td></tr>
<tr><td>Audits or reviews</td><td>• The results of any audits or reviews of Mineral Resource estimates.</td><td>• No audits were conducted on the resource and reserve updates provided in this report.</td></tr>
<tr><td>Discussion of relative accuracy/ confidence</td><td>• Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.
• The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.
• These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</td><td>• This coal resource update is based on a recalculation of coal volumes remaining in the No. 8 Mine West Extension pit, as of March 31, 2022. The starting surface is the airborne Lidar topographic survey of September 27, 2021, and no changes to modelling parameters used in the most recent 2021 Coal Resource and Coal Reserve Statement have been made (other than the starting surface and hence remaining coal volume).
• No statistical procedures were used in delineating coal resource category areas for either open pit or underground mineable resources. The criteria for delineating a coal resource based on surveyed, and sampled data points is based substantively on those recommended in GSC Bulletin 88-21, and the Competent Person accepts these criteria as reasonable and appropriate given the structural and stratigraphic complexity, continuity, and variability of coal quality parameters within the deposit.</td></tr>
</table>

7.4 Section 4 Estimation and Reporting of Ore Reserves

(Criteria listed in Section 1, and where relevant in Sections 2 and 3, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral Resource estimate for conversion to Ore Reserves	• *Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.* • *Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.*	• The coal reserves defined as a subset of those coal resources in the measured and indicated confidence categories (proven and probable coal reserves respectively). • The coal resource estimate used in this report as a basis for defining coal reserves, is that from the Coal Resource and Coal Reserve Statement completed by Norwest to the period ending December 31, 2017.
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	• The Competent Person is an employee of CST Coal, located at the mine site, and is well familiar with all mining, and exploration activities conducted at this site since 1986. The Competent Person has participated in geological, engineering, and economic modelling and reconciliation exercises, on both long and short range time frames, both as an employee and independent consultant.
Study status	• *The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.* • *The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.*	• The reserve update presented here relied on the cash flow analysis presented in the last Coal Resource and Coal Reserve Statement commissioned by CST Coal for this property, completed in early 2018. • The recovery, yield, economic and other Modifying Factors realized during the fiscal year ending March 31, 2022 did not materially change from those applied to convert coal resources to coal reserves in the most recent Coal Resource and Coal Reserve Statement. • This report is therefore based on a recalculation of remaining coal volume, tonnage and quality after the extraction of reserves in the CST Coal Canada Limited 2021 Fiscal Year.
Cut-off parameters	• *The basis of the cut-off grade(s) or quality parameters applied.*	• No cut-off parameters including coal seam thickness, in-seam ash, sulphur or other are applied to convert coal resources into coal reserves. Coal seam thickness and quality are applied to the coal resource modelling as described in Section 3 of Table 1.
Mining factors or assumptions	• *The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).*	• For open pit mining reserve calculations, the method to convert resources into reserves is to use 3D pit shell optimization methods applied to the resource model, adjusting both the geotechnical and economic constraints, mining area by mining areas. The three constraints which vary the most area by area for open pit resource areas are coal seam rank, haul distance to the processing plant, and pit wall angles as determined

Criteria	JORC Code explanation	Commentary
	• *The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.* • *The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling.* • *The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).* • *The mining dilution factors used.* • *The mining recovery factors used.* • *Any minimum mining widths used.* • *The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.* • *The infrastructure requirements of the selected mining methods.*	feasible from geotechnical analyses. • For underground mining reserve calculations the method is to generate iso-seam-dip maps, iso-seam-thickness, and iso-depth of overburden maps to guide the design of feasible layouts of mining portal location, apparent dip along roadway alignments, and pillar size. The four constraints to converting underground mineable coal resources which vary the most are coal seam rank, haul or conveyor distance to the process plant, average seam dip of the deposit and roof rock quality as determined from geotechnical core logging. • Recovery and dilution calculations are fixed for open pit mined coal seams by using a fixed 0.3 metres thickness of seam loss, and a fixed 0.4 metres of dilution, and a model block by block estimate of coal seam thickness to generate dilution and loss volume and tonnage vs unit in-situ volume by seam. • Recovery and dilution calculations for underground coal reserves are generated by applying a numbers of parameters, including roof rock hardness, roof cross-pitch dips, and whether the coal is mined as roadway development or depillaring operations. • No inferred resources are included in the conversion of measured and indicated coal resources to coal reserves. • No changes have been made to any of these coal resource to coal reserve conversion criteria since the last major Coal Resource and Coal Reserve Statement on the CST Coal Property, effective to December 31, 2017. • All coal reserves are based on mining methods which have been proven economic by previous operations on the property dating back to 1969 (i.e. no in-pit conveying systems, longwall or hydraulic mining)
Metallurgical factors or assumptions	• *The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.* • *Whether the metallurgical process is well-tested technology or novel in nature.* • *The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.* • *Any assumptions or allowances made for deleterious elements.*	• Not applicable in general, however yield models for the modelling of coal processing is based on the known separation efficiency characteristics, seam by seam in each reserve area.

Criteria	JORC Code explanation	Commentary
	• *The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.* • *For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?*	
Environmental	• *The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.*	• Multiple environmental concerns exist within the coal resource areas of this property. The most prominent of these are the difficulties of reclaiming high alpine ecosystems, and habitat of sensitive species (woodland caribou, mountain goats, bull trout and grizzly bear). • The waste rock, coarse reject and tailings from processing operations consist of sandstone, mudstone and coal, and hence are environmentally benign with no acid drainage issues. However, the weathering process in waste rock dumps does release Selenium, which can have deleterious effects on fish bearing aquatic environments. Currently while there is no limit for the release of Selenium, guidelines are provided by both the Canadian and the Alberta governments. In March 2018, the Government of Alberta revised the surface water guidelines for selenium to 2 micrograms per litre (ug/L) and an alert concentration of 1 ug/L. Exceedance of the alert concentration in sensitive environments indicates the need for increased monitoring of water and other ecosystem compartments to support early detection of potential Selenium bioaccumulation issues and provide earlier opportunities to commence proactive management actions. CST Coal has implemented a rigorous selenium monitoring and management plan which intends to support early detection of potential Selenium bioaccumulation in the watersheds surrounding its operational footprint. • The coal resource area considered most sensitive at this time, No. 12 North open pit area (high alpine ecosystem), is not currently included as a coal reserve area, pending a clarification from regulatory agencies on how long the permit process for such an area might take.
Infrastructure	• *The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.*	• The CST Coal Property has produced metallurgical grade coal for export since 1969 and as such has a developed network of haul roads, powerlines, radio and wireless network communications systems, and water management systems. • The process plant was constructed in 1970, and has gone evolutionary changes to improve washing yield and through put through the last two

Criteria	JORC Code explanation	Commentary
		decades.
Costs	• *The derivation of, or assumptions made, regarding projected capital costs in the study.* • *The methodology used to estimate operating costs.* • *Allowances made for the content of deleterious elements.* • *The source of exchange rates used in the study.* • *Derivation of transportation charges.* • *The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.* • *The allowances made for royalties payable, both Government and private.*	• This report does not include a cash flow analysis, as the economic parameters used in the 2017 Coal Resource and Coal Reserve Statement have not materially changed since that report was issued. The 2017 Coal Resource and Coal Reserve Statement cashflow analysis was generated with input costs estimated in Canadian dollars. • The 2017 Coal Resource and Coal Reserve Statement used a combination of historically realized and first principles derived cost parameters. First principle methods were used for the No. 8 Mine coal reserve. Other surface mines and the underground mine coal reserves used fixed/floating cost models with historical unit cost inputs for major equipment hours, explosives, and support equipment, and overheads. Equipment hours were based on haul truck cycle times by bench by pit by mine area, and historical major loading unit productivity. • Underground costs were based on historically verified overheads, and unit costs for development and depillar operations by machine group, with productivities of the machine groups based on historical performance. • The 2017 Coal Resource and Coal Reserve Statement used up to date guidance for all economic cost parameters including logistics costs, royalties, income and carbon taxes, fuel and power costs. • Logistic costs were based on historical rates, including factors for sampling surveying and demurrage.
Revenue factors	• *The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.* • *The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.*	• The selling price estimate for the 2017 Coal Resource and Coal Reserve Statement cashflow analysis reflects a 9 to 15% discount from a 3rd party benchmark Pacific Rim hard coking coal forecast. • The Competent Person considers the assumptions for future selling price and currency exchange used in the 2017 Coal Resource and Coal Reserve Statement to be reasonable.
Market assessment	• *The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.* • *A customer and competitor analysis along with the identification of likely market windows for the product.* • *Price and volume forecasts and the basis for these*	• The CST Coal Property has produced low volatile hard coking and semi-soft coking products sold predominantly into Japan, Korea, and China, but also into Brazil, Europe, Canada and the USA. • As such the product quality from the CST Coal Property is known to a wide range of customers, and has gained wide acceptance as a relatively low coking pressure, low sulphur, high-yield coking coal.

Criteria	JORC Code explanation	Commentary
	forecasts. • *For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.*	• The Competent Person accepts the future price and volume assumptions incorporated into the cash flow analysis to be reasonable.
Economic	• *The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.* • *NPV ranges and sensitivity to variations in the significant assumptions and inputs.*	• The 2017 Coal Resource and Coal Reserve Statement included a sensitivity analysis of the NPV to selling price, costs operating, costs capital, exchange rate and discount rate. • The resultant matrix of 4 discount rates from 8 to 15%, -1% exchange rate, +/- 10% selling price, operating costs, and capital costs (28 scenarios), had an average $839M CDN, a range of $1295M to $469M CDN and a standard deviation of $200M CDN.
Social	• *The status of agreements with key stakeholders and matters leading to social licence to operate.*	• CST Coal has signed "Community Impact and Benefit Agreements" (CIBA) with the two local organizations representing the aboriginal communities of Grande Cache.
Other	• *To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:* • *Any identified material naturally occurring risks.* • *The status of material legal agreements and marketing arrangements.* • *The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.*	• The CST Coal Property is subject to both Alberta Provincial and Canadian Federal regulatory jurisdictions, with the former responsible for the majority of environmental, safety, technical and legal requirements the mine operates under. • Both these regulatory jurisdictions represent relative politically stable environments for the purposed of long term mine planning and forecasting. • There are no long term marketing agreements in place and 2021 Fiscal Year production was sold on a spot market basis. • There are no significant unresolved material matters of a technical, regulatory, economic nature which have emerged since the 2017 Coal Resource and Coal Reserve Statement was issued in early 2018.
Classification	• *The basis for the classification of the Ore Reserves into varying confidence categories.* • *Whether the result appropriately reflects the Competent Person's view of the deposit.* • *The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).*	• The basis for the classification of coal reserves into the proven and probable confidence categories is all economic coal resources in the measured and indicated confidence categories respectively. In the judgement of the Competent Person this conversion is appropriate.

Criteria	JORC Code explanation	Commentary
Audits or reviews	• *The results of any audits or reviews of Ore Reserve estimates.*	• No independent audits of this report were conducted.
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.* • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* • *Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.* • *It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	• This update to the coal reserves remaining on the CST Coal Property as of March 31, 2022 are based on a recalculation of the coal reserves remaining in the No. 8 Mine after extraction by CST Coal of reserves in the Fiscal Year 2022. The starting surface is an airborne Lidar survey conducted over No. 8 Mine September 27, 2021, and no significant changes to reserve calculation methods used in the most recent 2021 Coal Resource and Coal Reserve Statement have been made. No changes have been made to any factors used to calculate density, recovery, dilution or processing yield for either run-of-mine (ROM) or saleable coal reserves. • The first principles method used to calculate the remaining coal reserves was cross-checked by comparing reported ROM and saleable tonnages against the difference between modelled coal reserves to March 31, 2021 and to March 31 2022. The reported ROM tonnage mined in this period was 0.27 MMt. By subtraction from the 2021FY reserve statement the reduction in reserves was 0.2 MMt (rounded to nearest 100K). The discrepancy is largely due to thicker than modelled coal seams encountered during mining.

FIGURES

Figure 1: CST Canada Coal Limited, Coal Lease Holdings Map

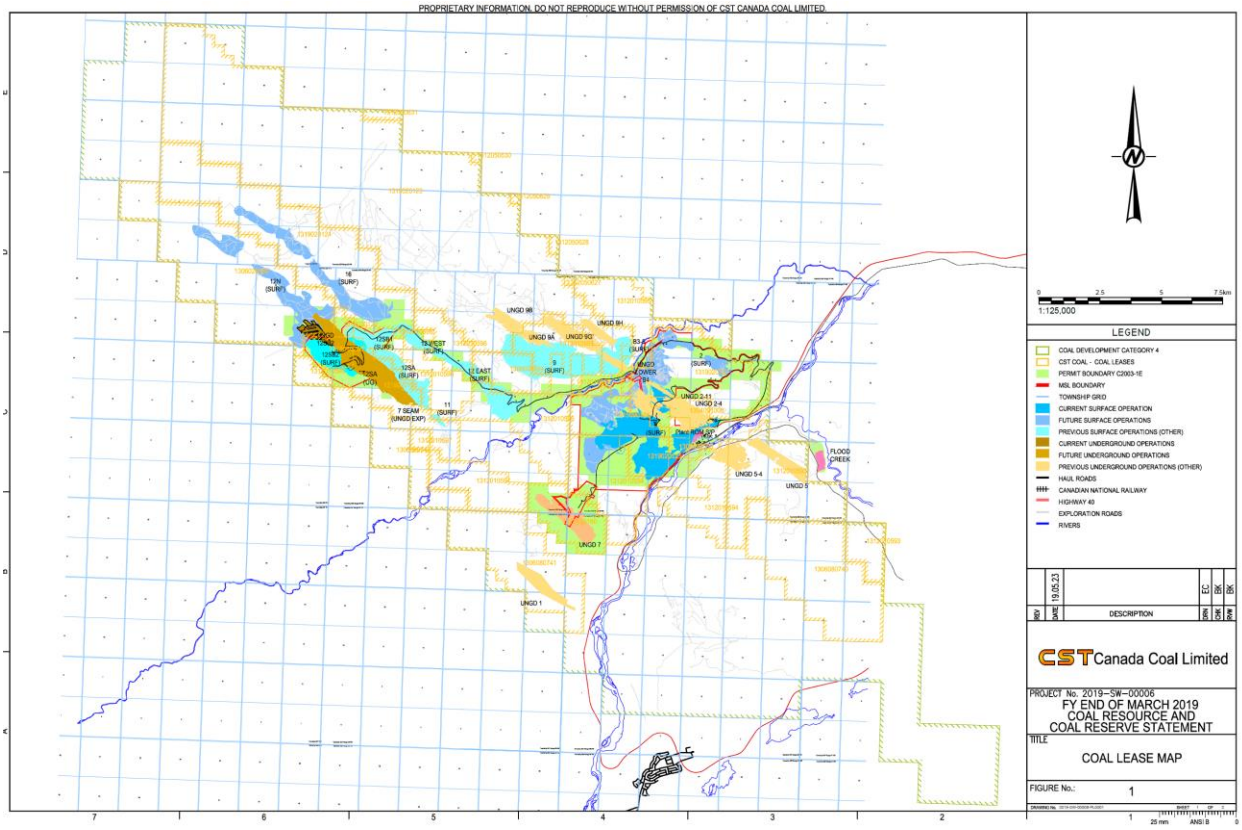
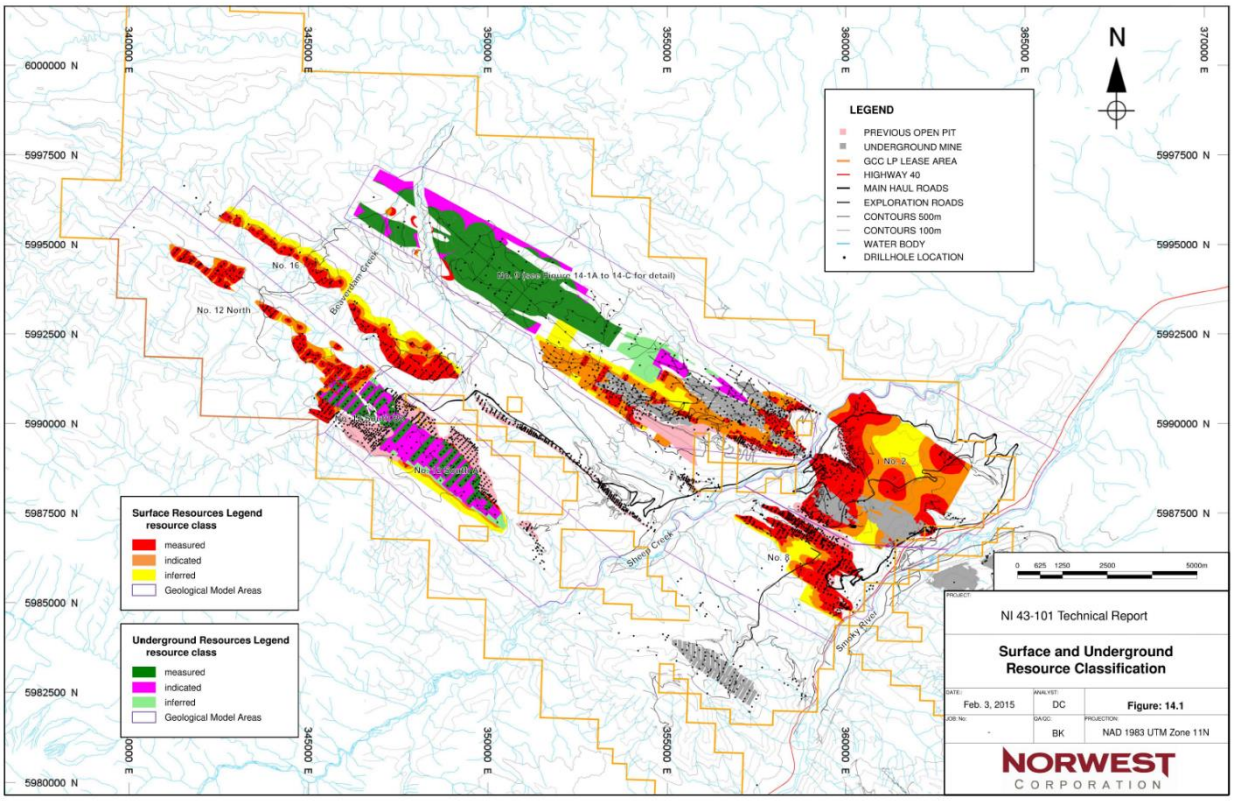


Figure 2: CST Canada Coal Limited Surface and Underground Resource Areas, Measured, Indicated and Inferred Confidence Categories



APPENDIX A

ABBREVIATIONS, DEFINITIONS, AND ACRONYMS

"adit" a horizontal opening to access a coal seam.

"anticline" a fold, generally convex upward, whose core contains the stratigraphically older rocks.

"ash" ash forming constituents which may be subdivided into two basic classes: those that are structurally a part of the coal and hence inseparably mixed with it and segregated impurities that can be eliminated to a greater or lesser extent by ordinary cleaning methods.

“as-received” represents an analysis of a sample as received at a laboratory.

"ASTM" the American Society for Testing Materials.

"BCM" bank cubic meter, which represents one cubic metre of material measured prior to disturbance.

“bedrock” consolidated rock underlying the Earth’s surface.

"bituminous coal" a class of coal having heat values, calculated on an ash-free basis, typically ranging from 24,400 to 32,600 KJ/kg, commonly used for utility and industrial steam purposes and in the steel-making industry, for making coke or for pulverized coal injection into the blast furnace.

"BTU" British thermal unit; the amount of heat needed to raise the temperature of one pound of water by one degree Fahrenheit.

"BTU/lb" BTUs per pound, an imperial unit of measure used to describe the amount of heat released on combustion of a pound of material, such as coal, under specific conditions.

“clean coal” coal that has been processed to meet metallurgical coal market specifications.

“climate” the statistical description of the weather of a region averaged over a period of, typically, 30 years.

“coal” readily combustible rock containing more than 50% by weight and more than 70% by volume of carbonaceous material, including inherent moisture, formed from compaction and alteration of various plant remains.

“coal field” region in which deposits of coal occur.

"coal rank" the qualitative classification of coal from lignite to anthracite based on calorific content and other qualitative and quantitative characteristics.

"coal washability" the analysis of the specific gravity distribution of chemical and physical characteristics of coal.

"coke" a hard, dry carbon substance produced by heating coal to a very high temperature in the absence of air, used primarily in the manufacture of iron and steel.

"coking coal" metallurgical coal that exhibits the physical and chemical properties that are necessary to form coke.

"continuous miner" a mining machine designed to remove coal from the face and to load that coal into cars or conveyors without the use of cutting machines, drills or explosives.

“cross-section” diagram of a vertical section through a volume of the Earth’s subsurface generally drawn normal to the strike direction the retreat

“depillar” In underground coal mines, the process of mining of support pillars left in place during development, as operations “retreat” from an underground area, leaving the roof to collapse behind them.

"dip" the angle at which a stratum is inclined from the horizontal, measured perpendicular to the strike and in the vertical-plane.

“drainage basin” area that gathers water which contributes to a body of water.

"drillhole" a circular hole made by drilling either to explore for minerals or to obtain geological information.

"dry basis" coal that has moisture removed by prescribed laboratory procedure or excluded by calculation.

“excavator” see “shovel”.

"fault" a fracture in rock along which the adjacent rock surfaces are differentially displaced.

"fixed carbon" the solid residue, other than ash, remaining after the volatile matter has been liberated from coal during combustion.

float/sink" a laboratory procedure which measures the floating and sinking of particles of material of various size fractions in heavy liquids at various specific gravities.

"**free swelling index" or "FSI"** a number assigned to particular coal used in determining its suitability for coke making or other uses. The index, from one to nine, is determined by tests established by ASTM standards.

"front end loader" a wheel loader with a digging bucket mounted on the front end that dumps.

"froth flotation" a process for recovering particles of coal or other minerals, in which the particles adhere to bubbles and can be removed as part of the froth.

"geophysical log" a graphic record of the measured or computed physical characteristics of the rock section encountered in a borehole, plotted as a continuous function of depth.

“**groundwater”** water present below the surface of the Earth.

"highwall" the excavated face of exposed overburden and coal or ore in an open-cast mine or the face or bank of the uphill side of a contour strip-mine excavation.

"interburden" the waste material located between economically recoverable resources.

"ISO" International Organization for Standardization, a worldwide federation of national standards bodies.

"isopach" the areal extent and thickness variation of a stratigraphic unit in geology.

“kilojoules per kilogram”, a metric unit of measure used to describe the amount of heat released on combustion of a kilogram of combustible material, such as coal, under specific conditions;

"lease" a contract between a landowner and a lessee, granting the lessee the right to search for and produce coal upon payment of an agreed rental, bonus and/or royalty.

"LOM Plan" Life-of-Mine Plan, referred to the production schedule for the entire mine as designed;

“long wall mining” a coal mining method for miners, namely excavating a U-shape mining work face in the coal seam with exits arranged at both upper and lower ends. The length of the mining work face ranges from 100m to 300m and on the work face the coal mining equipment mines coal back and forth.

"MBCM" million BCM.

"metallurgical coal" the various grades of coal suitable for making steel and includes coking coal and PCI coal.

"mineable" capable of being mined under current mining technology and environmental and legal restrictions, rules and regulations.

"out-of-seam dilution" or "OSD" the contamination of mined coal with rock outside of the coal seam being mined.

"outcrop" coal which appears at the surface; the intersection of a coal seam with the surface.

"overburden" materials that overlie a mineral deposit.

“parting” layer of non-coal material between separate coal seams.

“preparation stage of mine construction” It is the period for mine construction from completion of land expropriation, access of constructors to the date of official commencement of mine openings.

"PCI" pulverized coal injection, a process in which coal is pulverized and injected into a blast furnace. Those grades of coal used in the PCI process are generally non-coking. However, since such grades are utilized by the metallurgical industry, they are considered to be a metallurgical coal. PCI grade coal is used primarily as a heat source in the steel making process in partial replacement of high quality coking coals which are typically more expensive.

"pit" an open excavation from which the raw mineral being mined is extracted.

"processing plant" a facility where coal is prepared for market or other usage. It consists of equipment that separates coal from impurities. Coal is washed, thermally or mechanically dried, sized, stored and loaded for shipment or conveyed to use point.

"proximate analysis" a laboratory analysis to determine the percentage by prescribed methods of moisture, volatile matter, fixed carbon and ash.

"raw coal" coal from the breaker that has not been processed in a processing plant.

"reclamation" the rehabilitation of land at a mining site after the coal is extracted to a standard of land capability as existed before mining. Reclamation operations are usually conducted as production operations are taking place elsewhere at the site. This process commonly includes re- contouring or reshaping the land to its approximate original appearance, restoring topsoil and planting native grasses, trees and ground covers.

"room-and-pillar mining" a system of mining in which the coal is mined in rooms separated by pillars, which are subsequently mined.

"rotary drill" a drill machine that rotates a rigid, tubular string of rods to which is attached a bit for cutting rock to produce boreholes.

"royalty" a share of the product or profit reserved by the owner for permitting another to use the property.

"run of mine coal" or "ROM" the coal produced from the mine before it is processed.

"marketable coal" the shippable product of a coal mine or processing plant. Depending on customer specifications, marketable coal may be ROM, crushed- and screened (sized) coal, or the clean coal from a processing plant.

"seaborne metallurgical coal" metallurgical coal that is exported by ocean going ship from the producing country to the consuming country.

"seam" large deposit or layer of coal.

"shovel" a large electric or diesel powered machine used in the open pit mining process to remove and load overburden or coal.

"shuttle car" self-discharging underground equipment used for receiving coal from the mining machine and transferring it to an underground loading point or belt conveyor system.

"Shearer" coal mining machinery that breaks coal by rotary working mechanism and loads broken coal to the conveyor or other transportation equipment.

"Shield" equipment that is lifted, forwarded by hydraulic power, to provide strength for roof support.

"strike" the course or bearing of an inclined bed, vein or fault plane on a level surface; the direction of a horizontal line perpendicular to the direction of the dip.

"strip ratio" the ratio of the volume of overburden moved to the tonnage of coal produced, measured in terms of BCM of overburden per tonne of coal produced. A lower strip ratio is an operational advantage because less overburden has to be removed in order to expose the raw coal.

"surface mine" a mine in which the mineral deposit lies sufficiently near the surface to be extracted by removing the overburden.

"service area" a site occupied by surface buildings, facilities as well as administrative offices which provides services for surface and auxiliary production system of a colliery.

"syncline" a series of flat-lying rock strata that has been folded into a trough-like geological structure.

"thrust fault" a fault with a dip of 45° or less over much of its extent, on which the hanging wall appears to have moved upward relative to the footwall.

"tonne" a metric tonne, which is approximately 2,205 pounds, as compared to a "short" ton, which is 2,000 pounds, or a "long" ton, which is 2,240 pounds. Unless expressly stated otherwise, the metric tonne is the unit of measure used in this document.

"tunnel way" a long, narrow, horizontal or nearly horizontal underground passage that is open to the atmosphere at both ends.

"underground mine" a mine that is located below the earth's surface. Coal is removed mechanically and transferred by shuttle car or conveyor to the surface.

"volatile matter" those products, exclusive of moisture, given off by a material such as gas or vapour, determined by definite prescribed methods, which may vary according to the nature of the material.

"yield" the ratio of the clean coal product to the raw coal plant feed, expressed as a percentage.